

## PATENT COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner  
US Department of Commerce  
United States Patent and Trademark  
Office, PCT  
2011 South Clark Place Room  
CP2/5C24  
Arlington, VA 22202  
ETATS-UNIS D'AMERIQUE  
in its capacity as elected Office

<b>Date of mailing</b> (day/month/year) 04 May 2001 (04.05.01)	
<b>International application No.</b> PCT/AU00/00968	<b>Applicant's or agent's file reference</b> 9380PC2-PCF
<b>International filing date</b> (day/month/year) 14 August 2000 (14.08.00)	<b>Priority date</b> (day/month/year) 13 August 1999 (13.08.99)
<b>Applicant</b> DURACK, Michael, James	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:  
09 March 2001 (09.03.01)

☐ in a notice effecting later election filed with the International Bureau on:  
\_\_\_\_\_

2. The election ☒ was  
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

<b>The International Bureau of WIPO</b> 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	<b>Authorized officer</b> Beatriz LARGO Telephone No.: (41-22) 740.83.38
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**(19) World Intellectual Property Organization**  
International Bureau



**(43) International Publication Date**  
**22 February 2001 (22.02.2001)**

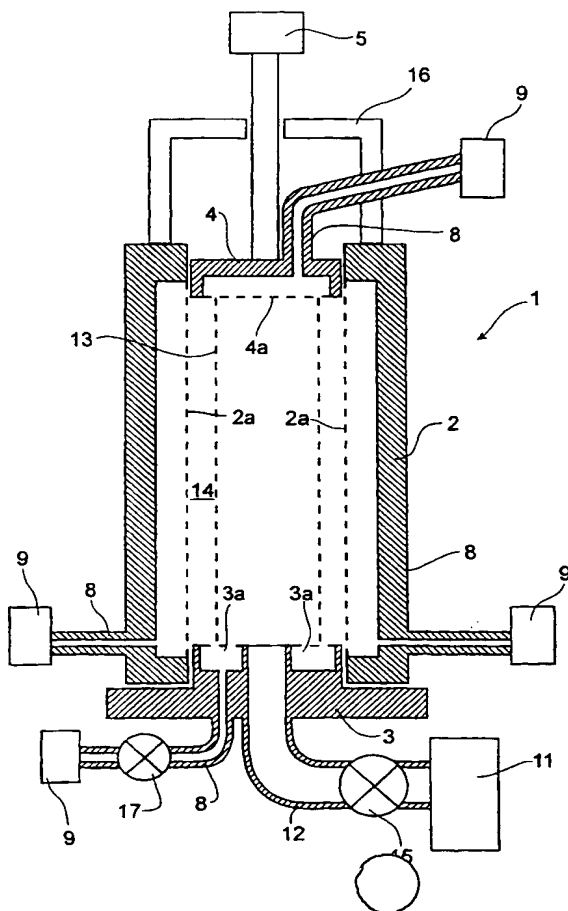
(10) International Publication Number  
WO 01/12404 A1

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- |   |                             |  |
|---|-----------------------------|--|
| (51) <b>International Patent Classification<sup>7</sup>:</b><br>1/50, 7/30, 7/32  | <b>B28B 1/26,</b>           | (71) <b>Applicant and</b>  |
| (21) <b>International Application Number:</b>   | PCT/AU00/00968              | (72) <b>Inventor:</b> DURACK, Michael, James [AU/AU]; 127 Lambert Street, Indooroopilly, Queensland 4068 (AU).   |
| (22) <b>International Filing Date:</b>  | 14 August 2000 (14.08.2000) | (74) <b>Agent:</b> FISHER ADAMS KELLY; Level 13, AMP Place, 10 Eagle Street, Brisbane, Queensland 4000 (AU).   |
| (25) <b>Filing Language:</b>  | English                     | (81) <b>Designated States (<i>national</i>):</b> AE, AG, AL, AM, AT, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW. |
| (26) <b>Publication Language:</b>   | English                     | (84) <b>Designated States (<i>regional</i>):</b> ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW). Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM). European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,   |
| (30) <b>Priority Data:</b><br>PQ 2196                      13 August 1999 (13.08.1999)      AU  |                             |  |
| (71) <b>Applicant (<i>for all designated States except US</i>):</b> APPLIED TECHNOLOGY & PLANNING PTY LTD [AU/AU]; Unit 8, Mayne Plaza, 123 Abbotsford Road, Bowen Hills, Queensland 4006 (AU). |                             |  |

[Continued on next page]

**(54) Title:** METHOD AND APPARATUS FOR MOULDING PASTES AND SLURRIES



**(57) Abstract:** A high strength lightweight product formed from particulate inorganic materials such as a masonry building block is formed in a mould (1) from a flowable slurry of inorganic particulate materials and water. The interior of the mould is lined with perforate walls (2a, 3a, 4a, 3) fluidically coupled to a vacuum source (9). The fluid slurry contains entrained air and when pumped into the mould under superatmospheric pressure the gas bubbles contract in size. The fluidic mass is then subjected to subatmospheric pressure which enables the gas bubbles to expand the expel excess moisture from the mass.

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IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

— *With international search report.*

## INTERNATIONAL SEARCH REPORT

 International application No.  
 PCT/AU00/00968
**A. CLASSIFICATION OF SUBJECT MATTER**Int. Cl. <sup>7</sup>: B28B1/26, 1/50, 7/30, 7/32

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**
 Minimum documentation searched (classification system followed by classification symbols)  
 B28B1/26, 1/50, 7/30, 7/32

 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
 AU IPC AS ABOVE

 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
 WPAT: Dewater and vacuum and pressure
**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 2066139 A Shigeo Ando (8 July 1981)	
A	US 5700409 A Arthur A. Corry (23 December 1997)	
A	EP 0396302 A.C.G. Bevan Ass. Ltd. (07 November 1990)	

☐ Further documents are listed in the continuation of Box C
 ☐ See patent family annex

* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed		"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family
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 Date of the actual completion of the international search  
 6 September 2000

Date of mailing of the international search report

11 SEP 2000

Name and mailing address of the ISA/AU

Authorized officer

 AUSTRALIAN PATENT OFFICE  
 PO BOX 200, WODEN ACT 2606, AUSTRALIA  
 E-mail address: pct@ipaaustralia.gov.au  
 Facsimile No. (02) 6285 3929

 G. CARTER  
 Telephone No : (02) 6283 2154

INTERNATIONAL SEARCH REPORT  
Information on patent family members

International application No.  
PCT/AU00/00968

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report				Patent Family Member			
GB	2066139	AU	60247/80	DE	3031982	FR	2471264
		IT	1193957	JP	56099610	US	4335065
		JP	56133111	JP	56135005	JP	56142008
US	5700409	NONE					
EP	396302	AU	54578/90	BR	9002049	CA	2015617
		GB	2231000	JP	3061503	NO	901973
		US	5139409				
END OF ANNEX							

**PATENT COOPERATION TREATY**  
**PCT**  
**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**  
(PCT Article 36 and Rule 70)

REC'D 23 MAR 2001  
PCT

Applicant's or agent's file reference 9308pc2	<b>FOR FURTHER ACTION</b>	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).
International Application No. <b>PCT/AU00/00968</b>	International Filing Date ( <i>day/month/year</i> ) 14 August 2000	Priority Date ( <i>day/month/year</i> ) 13 August 1999
International Patent Classification (IPC) or national classification and IPC  <b>Int. Cl. <sup>7</sup> B28B1/26,1/50,7/30,7/32</b>		
Applicant <b>APPLIED TECHNOLOGY &amp; PLANNING PTY LTD et al</b>		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 3 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheet(s).

3. This report contains indications relating to the following items:

- |      |                                     |   |
|------|-------------------------------------|---|
| I    | <input checked="" type="checkbox"/> | Basis of the report   |
| II   | <input type="checkbox"/>            | Priority  |
| III  | <input type="checkbox"/>            | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |
| IV   | <input type="checkbox"/>            | Lack of unity of invention  |
| V    | <input checked="" type="checkbox"/> | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| VI   | <input type="checkbox"/>            | Certain documents cited   |
| VII  | <input type="checkbox"/>            | Certain defects in the international application  |
| VIII | <input type="checkbox"/>            | Certain observations on the international application   |

Date of submission of the demand 9 March 2001	Date of completion of the report 15 March 2001
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer  <b>G.Carter</b> Telephone No. (02) 6283

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/AU00/00968

## I. Basis of the report

1. With regard to the **elements** of the international application:\*

- ☒ the international application as originally filed.
- ☐ the description,      pages , as originally filed,  
    pages , filed with the demand,  
    pages , received on      with the letter of
- ☐ the claims,      pages , as originally filed,  
    pages , as amended (together with any statement) under Article 19,  
    pages , filed with the demand,  
    pages , received on      with the letter of
- ☐ the drawings,      pages , as originally filed,  
    pages , filed with the demand,  
    pages , received on      with the letter of
- ☐ the sequence listing part of the description:  
    pages , as originally filed  
    pages , filed with the demand  
    pages , received on      with the letter of

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, was on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description,      pages
- ☐ the claims,      Nos.
- ☐ the drawings,      sheets/fig.

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/AU00/00968

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims 1-24	YES
	Claims	NO
Inventive step (IS)	Claims 1-24	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-24	YES
	Claims	NO

**2. Citations and explanations (Rule 70.7)**

The related art did not disclose a method or apparatus for dewatering moulding pastes in a mould in which excess water is expressed from the moulding material by volumetric expansion within the material.